

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended)An address translator for connecting a first network ~~A~~ conforming to ~~an a first~~ addressing system ~~P~~ to a second network ~~B~~ conforming to ~~an a second~~ addressing system ~~Q~~, said address translator comprising:

an address translating function for translating ~~an a Layer 3~~ address conforming to the first addressing system ~~P~~ to ~~an a Layer 3~~ address conforming to the second addressing system ~~Q~~, or vice versa; and

a detecting function for detecting ~~a~~ communication data conforming to a particular protocol based on at least ~~one of information on a destination and~~ information on a port number contained in a header of the communication data,

wherein said address translator translates, by said address translation function, ~~an a Layer 3~~ address described in a Layer 3 header of the communication data to ~~a Layer 3 address corresponding to Layer 3 of the~~ Open System Interconnection (OSI) model, and

wherein when said address translator detects ~~a said~~ communication data conforming to said particular protocol, said address translator creates translation information including a correspondence relationship between a Layer 3 address ~~addresses~~ in the first addressing system ~~P~~ and a Layer 3 address ~~addresses~~ in the second addressing system ~~Q~~ for translating, ~~by said address translation function, an address~~ a Layer 3 address described in a

region higher than Layer 3 of the communication data to a higher Layer
address corresponding to a Layer higher than Layer 3 of the OSI model.

2. (currently amended) The address translator according to claim 1,
further comprising:

a communicating means for communicating with a server device,
wherein said address translator sends said translation information and
the region higher than Layer 3 of the communication data to said server
device, and receives information including said Layer 3 address described in
the region higher than Layer 3 ~~higher Layer address corresponding to the~~
~~layer higher than Layer 3 of the OSI model that~~which has been translated by
said server device.

3. (currently amended) The address translator according to claim 1,
further comprising:

a processing part for translating said Layer 3 address described in the
region higher than Layer 3 of the communication data.

4. (currently amended) A message processing method of
~~processing a message including a first portion and a second portion,~~
comprising:

first translation processing for translating information in the first portion
a Layer 3 address of the message from information conforming to a first
addressing system to information conforming to a second addressing system,

~~wherein said first translation processing translates said information in the first portion to a Layer 3 address corresponding to Layer 3 of the Open System Interconnection (OSI) model;~~

~~detection determination processing for detecting determining whether or not the second portion requires a translation a message conforming to a particular protocol based on at least one of information on a destination, and information on a port number contained in a header of the message; and~~

~~when the address translator detects a message conforming to the particular protocol, creating translation information for translating a Layer 3 address described in a region higher than Layer 3 of the message~~

~~second translation processing for translating information in the second portion, determined to require a translation, from information conforming to the first addressing system to information conforming to the second addressing system,~~

~~wherein said second translation processing, upon determining that translation is required, translates said information in the second portion to a higher Layer address corresponding to a Layer higher than Layer 3 of the OSI model.~~

5. (currently amended) The message processing method according to claim 4, further comprising:

using a first server and a second server;

performing said first translation processing in said first server;

transferring the translation information and the region higher than Layer 3 of the message in said ~~second portion~~ from said first server to said second server;

extracting, by said second server, a parameter which requires a the translation from said region higher than Layer 3 of the message ~~second portion~~;

performing ~~said second~~ translation processing for translating said Layer 3 address described in the region higher than Layer 3 of the message on said extracted parameter in said second server; and

transferring the information in said region higher than Layer 3 of the message ~~second portion~~ which has undergone said second translation processing from said second server to said first server.

6. (currently amended) The message processing method according to claim 5, wherein said second server has a table indicative of parameters in the region higher than Layer 3 of the message which require a the translation, and extracts a the parameter which requires a the translation from said region higher than Layer 3 of the message ~~second portion~~ based on said table.

7. (currently amended) The message processing method according to claim 5, wherein said first server transfers the parameter which requires a the translation together, with a tag added thereto, in said region higher than Layer 3 of the message ~~second portion~~ to said second server, and

wherein said second server extracts a the parameter which requires a the translation from said region higher than Layer 3 of the message~~second portion~~ based on said tag.

8. (currently amended) The message processing method according to claim 4, wherein ~~said first portion is an IP header,~~ said region higher than Layer 3 of the message~~second portion~~ is a payload including a Session Initiation Protocol (SIP) message, ~~one of said first protocol and second protocol is IPv4, the other is IPv6, and information for translation is an address.~~

Claims 9-19 (canceled).

20. (currently amended) The address translator according to claim 2, wherein ~~said address translator sends information in said second region of the communication data with the translation information, and said region higher than Layer 3 of the communication data~~ information in said second region comprises parameter which requires translation of the region higher than Layer 3 of the communication data.

21. (currently amended) The address translator according to claim 20, wherein said address translator sends the region higher than Layer 3 of the communication data ~~information in said second region~~ with a tag added to said parameter by said address translator,

wherein said server device extracts the parameter which requires ~~a~~the translation from the region higher than Layer 3 of the communication data ~~second region~~-based on said tag which requires the translation of the region higher than Layer 3 of the communication data.

22. (currently amended) The address translator according to claim 1, wherein in case of that the first addressing system ~~P~~ is IPv4, the second addressing system ~~Q~~ is IPv6, and

wherein in case of that the first addressing system ~~P~~ is IPv6 and the second addressing system ~~Q~~ is IPv4.

23. (previously presented) The message processing method according to claim 4, wherein in case of that the first addressing system is IPv4, the second addressing system is IPv6, and

wherein in case of that the first addressing system is IPv6, the second addressing system is IPv4.

Claim 24 (canceled).

25. (new) An address translating system comprising:

an address translator; and

a server device, which are connected to a first network conforming to a first address system and a second network conforming to a second addressing system,

wherein the address translator comprises:

an address translating means for translating a Layer 3 address conforming to the first addressing system to a Layer 3 address conforming to the second addressing system, or vice versa; and

a detecting means for a communication data conforming to a particular protocol based on at least information on a port number contained in a header of the communication data,

wherein the address translator, by the address translating means, a Layer 3 address described in a Layer 3 header of the communication data, and

wherein when the address translator detects a communication data conforming to the particular protocol, the address translator creates translation information including a correspondence relationship between a Layer 3 address in the first addressing system and a Layer 3 address in the second addressing system for translating a Layer 3 address described in a region higher than Layer 3 of the communication data.

26. (new) The address translating system according to claim 25, wherein the address translator further comprises:

a communicating means for communicating with the server device,

wherein the address translator sends the translation information and the region higher than Layer 3 of the communication data to the server device, and receives information including the Layer 3 address described in the region higher than Layer 3 which has been translated by the server device.

27. (new) The address translating system according to claim 26, wherein the server device receives the translation information and the region higher than Layer 3 of the communication data from the address translator, and translates the Layer 3 address conforming to the first addressing system described in the region higher than Layer 3 of the communication data to a Layer 3 address conforming to the second addressing system based on the translation information, and sends information including the Layer 3 address described in the region higher than Layer 3 which has been translated by the server device.

28. (new) The address translating system according to claim 25, wherein the region higher than Layer 3 of the communication data, which is sent from the address translator to the server device, comprises:

parameter which requires translation of the region higher than Layer 3 of the communication data.

29. (new) The address translating system according to claim 28, wherein the address translator sends the region higher than Layer 3 of the communication data with a tag added to the parameter which requires the translation of the region higher than Layer 3 of the communication data,

wherein the server device extracts the parameter which requires the translation from the region higher than Layer 3 of the communication data based on the tag.

30. (new) The address translating system according to claim 25, wherein in the case of that the first addressing system is IPv4, the second addressing system is IPv6, and

wherein in the case of that the first addressing system is IPv6, the second addressing system is IPv4.

31. (new) The address translating system according to claim 25, wherein the particular protocol is a Session Initiation Protocol (SIP).